

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 7, line 17 as shown below.

At time t_2 , as shown in Fig. 4C, transfer control signal T_X is set to a high state, sufficiently high for voltage V_C of channel region 11 to be greater than V_{dd} . The voltage of read region 7 increases to reach a voltage V_0 due to the coupling between transistor M_4 and read region 7. This enables increasing the electric field favoring the charge transfer from photodiode D to read node S. The charges stored at the level of photodiode D flow to read region 7 and ~~[[raise]]~~ diminish the voltage of this region to value V_1 . In the case where charge Q is relatively low, voltage V_1 may be greater than V_{dd} and greater than V_C . Hatched region Q' delimited by voltages V_0 and V_1 shows the charges stored at the level of read region 7.

Please replace the paragraph beginning on page 8, line 2 as shown below.

At time t_4 , as shown in Fig. 4E, reset control signal RST is set to the low state. The voltage of channel region 12 of transistor M_1 thus increases to enable flowing of charges ~~[[Q']]~~ Q' stored at the level of read region 7 to supply region 8. The voltages of regions 7, 12, and 8 thus stabilize at the level of supply voltage V_{dd} .